CLAIMS

5

10

15

30

35

- 1. A device for converting light from, for example, a laser, VCSEL (vertical cavity surface emitting laser) or light emitting diode/diodes to a plane of propagation, comprising a collimated or focused light emitter (3), characterized in that a full or a portion or several portions of a rotationally symmetric double reflecting component (5) is fixedly provided coaxially in the path of beams (2) from the collimated or focused light emitter (3) so that the light is deflected in a desired angled plane of propagation (17) which extends up to 360° around the double reflecting component (5).
- 2. A device according to claim 1, wherein settable means (8, 9, 14, 20, 21) is provided in the path of beams (2) between the collimated light emitter (3) and the double reflecting component (5), the setting of the means (8, 9, 14, 20, 21) determines the incoming angle of the light (2) towards the double reflecting component (5) and thus the angle of the plane of propagation (17).
 - 3. A device according to claim 1 or 2, wherein the settable means comprises one or several coaxially arranged axicons (8, 9) where at least one is displaceably provided (9) along an axis which is common with the axis of the double reflecting component (5).
 - 4. A device according to claim 3, wherein the axicons (8, 9) are refractive, diffractive or of Fresnel type.
 - 5. A device according to claim 1 or 2, wherein the settable means is a zoom lens (14) coaxially arranged with the double reflecting component (5).
- 6. A device according to any one of the previous claims, wherein the collimated emitter (3) emits light (2) in the shape of a ring (11) or that a component of refractive,

WO 2004/044641 PCT/SE2003/001665

13

diffractive or Fresnel type is provided in order to form the light into a desired shape.

10

20

- 7. A device according to any one of the previous claims, wherein a certain portion or portions of the double reflecting component (5) is blocked for light (2) so that a portion or portions of the plane of propagation (17) is eliminated.
- 8. A device according to any one of claim 1-4, herein an electrically driven two-axes micromechanical mirror (20) is hit by the collimated light (2), which mirror (20) is operable so that the light beam (2) is deflected in such a way that it describes the mantle surface of a cone, which is passed on to the double reflecting component (5).